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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,162	11/26/2003	Makoto Nishimura	2003_1716A	5536

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EXAMINER	
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ART UNIT	PAPER NUMBER
3679	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/721,162	NISHIMURA ET AL.	
	Examiner	Art Unit	
	Joshua T. Kennedy	3679	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6 and 12-18* is/are pending in the application.

4a) Of the above claim(s) *1,3 and 12-14* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2,4-6 and 15-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/13/2007 has been entered.

Claims 1, 3, 12-14 have been withdrawn.

Claims 7-11 have been cancelled.

Claims 2, 4-6 and15-18 have been examined.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 5, 6, 15, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tetsuo et al (JP Patent 09-060682) in view of Schleicher (US Patent 5,305,517).

As to Claims 2 and 17. Tetsuo et al disclose a tube assembly comprising a first tubular body (2) and a second tubular body (1) disposed such that walls of said first and second tubular bodies overlap (Fig 1), a plurality of joint portions (P) being formed between said first and second tubular bodies by drawing in a drawing direction an overlapping part of the walls of said first and second tubular bodies at a plurality of positions (Fig 1), wherein said plurality of joint portions includes at least one first joint portion in which the wall of said first tubular body is laterally extended into the wall of said second tubular body (Examiner considers the dented joint portions to extend laterally into the wall; also, see note below) and at least one second joint portion in which the walls of said first tubular body and said second tubular body are in contact with each other in a cup-like surface configuration (Fig 1; Examiner considers the dent portion to form a cup-like surface).

the wall of said first tubular body including a forward surface located forward relative to the drawing direction, and the wall of said second tubular body including a rearward surface located rearward relative to the drawing direction (Fig 1),

a joint portion (located at P), the forward surface including a portion that is reduced diametrically relative to the drawing direction, the rearward surface including a portion that is reduced diametrically relative to the drawing direction, the diametrically reduced portion of the forward surface being in contact with the diametrically reduced portion of the rearward surface such that they are separable from each other in the drawing direction (Fig 1).

However, Tetsuo et al do not disclose an additional joint portion, wherein the forward surface including a concave portion that is enlarged diametrically relative to the drawing direction, the rearward surface including a convex portion that is enlarged diametrically relative to the drawing direction, the diametrically enlarged portion of the forward surface being extruded into the diametrically enlarged portion of the rearward surface, thus ensuring high peeling resistance.

Schleicher teaches a linkage assembly (Figs 18-19) having a joint portion wherein the forward surface including a concave portion that is enlarged diametrically (342) relative to the drawing direction, the rearward surface including a convex portion (346) that is enlarged diametrically relative to the drawing direction (Fig 7), the diametrically enlarged portion of the forward surface being extruded into the diametrically enlarged portion of the rearward surface which "enables material to be concentrated in the corner to further strengthen the joint and to increase peel strength" (Col 8, Lines 15-24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the joint portion of Tetsuo et al to have an additional joint portion as taught by Schleicher to enable the material to be concentrated in the corner to further strengthen the joint and to increase peel strength.

It is the patentability of the product, and not recited process steps, that is to be determined in product-by-process claims irrespective of whether or not only process has been recited. Accordingly, it is of little consequence how the joint portions were formed when the joint portions are present. See MPEP § 2113.

Examiner also notes that the specific method of forming is not germane to the issue of patentability of the device itself. Therefore, the limitation "extruded" has been given only limited patentable weight. See MPEP § 2113.

As to Claims 5 and 6. Tetsuo et al disclose said first tubular body (2) forms a support member being selected from a spring seat and a knuckle bracket and said second tubular body (1) forms a tube for a piston-cylinder assembly (Abstract, Lines 6-8).

As to Claims 15 and 18. Tetsuo et al disclose an assembly, comprising:

a first body having a first layer (2) and

a second body having a second layer (1), the bodies being disposed such that the first and second layers overlap (Fig 1), a plurality of joint portions (P) being formed between said first and second bodies by drawing an overlapping part of the layers of said first and second bodies at a plurality of positions (Fig 1),

wherein said plurality of joint portions includes at least one first joint portion in which the first layer is laterally extended into the second layer (Examiner considers the dented joint portions to extend laterally into the wall; also, see note below) and at least one second joint portion in which the first layer and the second layer are contact with each other in a cup-like surface configuration (Fig 1; Examiner considers the dent portion to form a cup-like surface),

a joint portion, the forward surface including a portion that is reduced diametrically relative to the drawing direction, the rearward surface including a portion that is reduced diametrically relative to the drawing direction, the diametrically reduced

portion of the forward surface being in contact with the diametrically reduced portion of the rearward surface such that they are separable from each other in the drawing direction (Fig 1).

However, Tetsuo et al do not disclose an additional joint portion, wherein the forward surface including a portion that is enlarged diametrically relative to the drawing direction, the rearward surface including a portion that is enlarged diametrically relative to the drawing direction, the diametrically enlarged portion of the forward surface being extruded into the diametrically enlarged portion of the rearward surface, thus ensuring high peeling resistance.

Schleicher teaches a linkage assembly (Figs 18-19) having a joint portion wherein the forward surface including a concave portion that is enlarged diametrically (342) relative to the drawing direction, the rearward surface including a convex portion (346) that is enlarged diametrically relative to the drawing direction (Fig 7), the diametrically enlarged portion of the forward surface being extruded into the diametrically enlarged portion of the rearward surface which "enables material to be concentrated in the corner to further strengthen the joint and to increase peel strength" (Col 8, Lines 15-24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the joint portion of Tetsuo et al to have an additional joint portion as taught by Schleicher to enable the material to be concentrated in the corner to further strengthen the joint and to increase peel strength.

It is the patentability of the product, and not recited process steps, that is to be determined in product-by-process claims irrespective of whether or not only process has

been recited. Accordingly, it is of little consequence how the joint portions were formed when the joint portions are present. See MPEP § 2113.

Examiner also notes that the specific method of forming is not germane to the issue of patentability of the device itself. Therefore, the limitation "extruded" has been given only limited patentable weight. See MPEP § 2113.

Claims 2, 4, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tetsuo et al in view of Stevenson et al (US Patent 6,814,531).

Tetsuo et al disclose a tube assembly comprising a first tubular body (2) and a second tubular body (1) disposed such that walls of said first and second tubular bodies overlap (Fig 1), a plurality of joint portions (P) being formed between said first and second tubular bodies by drawing in a drawing direction an overlapping part of the walls of said first and second tubular bodies at a plurality of positions (Fig 1), wherein said plurality of joint portions includes at least one first joint portion in which the wall of said first tubular body is laterally extended into the wall of said second tubular body (Examiner considers the dented joint portions to extend laterally into the wall; also, see note below) and at least one second joint portion in which the walls of said first tubular body and said second tubular body are in contact with each other in a cup-like surface configuration (Fig 1; Examiner considers the dent portion to form a cup-like surface).

the wall of said first tubular body including a forward surface located forward relative to the drawing direction, and the wall of said second tubular body including a rearward surface located rearward relative to the drawing direction (Fig 1),

a joint portion, the forward surface including a portion that is reduced diametrically relative to the drawing direction, the rearward surface including a portion that is reduced diametrically relative to the drawing direction, the diametrically reduced portion of the forward surface being in contact with the diametrically reduced portion of the rearward surface such that they are separable from each other in the drawing direction (Fig 1).

However, Tetsuo et al do not disclose an additional joint portion comprising a rivet that is laterally extruded into the wall of the second tubular body, wherein the forward surface including a concave portion that is enlarged diametrically relative to the drawing direction, the rearward surface including a convex portion that is enlarged diametrically relative to the drawing direction, the diametrically enlarged portion of the forward surface being extruded into the diametrically enlarged portion of the rearward surface, thus ensuring high peeling resistance.

Stevenson et al teach an assembly (Fig 8) having a joint portion comprising a rivet (100) that is laterally extruded into the wall of the second tubular body, to prevent relative rotation of the two secured bodies joined together (Col 1, Lines 52-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the joint portion of Stevenson et al to have an additional joint portion as taught by Downey et al to prevent relative rotation of the two secured bodies joined together.

Examiner again notes that it is the patentability of the product, and not recited process steps, that is to be determined in product-by-process claims irrespective of whether or not only process has been recited. Accordingly, it is of little consequence

how the joint portions were formed when the joint portions are present. See MPEP § 2113. Examiner also notes that the specific method of forming is not germane to the issue of patentability of the device itself. Therefore, the limitations "extruded" and "formed by a rivet" has been given only limited patentable weight. See MPEP § 2113.

Response to Arguments

Applicants' arguments with respect to claims 2, 5, 6 and 15, previously rejected in view of Downey et al, have been considered but are moot in view of the new ground(s) of rejection.

Applicants' arguments filed 8/13/2007 regarding claims 2, 4 and 16, previously rejected in view Stevenson et al have been fully considered but they are not persuasive.

Applicants argue:

> "an asymmetric rivet is used to prevent relative sheet rotation...this means that two metal sheets are connected by one joint. Therefore...it is not possible to add another joint to this assembly." (Page 9)

Examiner respectfully disagrees. The mere existence of differences between the prior art and an invention does not establish the invention's nonobviousness. The gap between the prior art and respondent's system is simply not so great as to render the system nonobvious to one reasonably skilled in the art. Dann Commission of PET V. Johnston 189 USPQ 257. In this particular case, simply because a single joint is use to connect multiple sheets in one application does not preclude the use of that joint in

combination with another joint. Adding the second joint of Stevenson adds a factor of safety in the assembly and thus, creates a stronger connection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua T. Kennedy whose telephone number is (571) 272-8297. The examiner can normally be reached on M-F: 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JTK
8/24/2007

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